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~~extraction. The remaining solvent is evaporated from the solution, leaving the polyurethane thermoplastic elastomer.--~~

IN THE CLAIMS:

Please cancel claims 1-13, and please add new claims 20-37 as follows:

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20. An apparatus comprising an inflatable vehicle occupant protection device and a gas generating material that, when ignited produces gas to inflate the inflatable vehicle occupant protection device, the gas generating material comprising:

an inorganic oxidizer salt; and
a thermoplastic elastomer, said thermoplastic elastomer being a polyurethane formed from an aromatic diisocyanate, a linear energetic polymer with a hydroxyl functionality of two or less, and optionally a secondary diol, wherein the amount of aromatic diisocyanate, linear energetic polymer, and secondary diol used to form the polyurethane are controlled so that the ratio of isocyanate groups to hydroxyl groups used to form the polyurethane is about 1.

21. The apparatus of claim 20 wherein the linear energetic polymer is selected from the group consisting of glycidyl azide polymer, poly-glycidyl nitrate, poly-nitratomethyl-methyl oxetane, poly-bisazido-methyloxetane, poly-azidomethyl-methyloxetane, poly-nitraminomethyl-methyloxetane, and diethyleneglycoltriethyleneglycolnitraminodiacetic acid.

Cl 3
22. The apparatus of claim 20 wherein the aromatic diisocyanate is 4,4'-methylene bis-phenylisocyanate.

Cl 4
23. The apparatus of claim 20 wherein the linear energetic polymer is glycidyl azide polymer with a hydroxyl functionality of two or less.

Cl 5
Cont'd Sub D
24. The apparatus of claim 23 wherein the glycidyl azide polymer has a molecular weight from about 25,000 g/mole to about 35,000 g/mole and a hydroxyl functionality of 2.

Cl 6
25. The apparatus of claim 20 wherein the inorganic salt oxidizer is selected from the group consisting of alkali metal nitrates, alkaline earth metal nitrate, alkali metal perchlorates, alkaline earth metal perchlorates, ammonium perchlorate, and ammonium nitrate.

Cl 7
26. The apparatus of claim 20 wherein the inorganic salt oxidizer is phase stabilized ammonium nitrate.

Cl 8
27. The apparatus of claim 20 wherein the gas generating material further comprises a supplemental fuel.

Cl 9
28. The apparatus of claim 27 wherein the supplemental fuel is cyclotrimethylenetrinitramine.

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C 10
Subj 12
C 10
Subj 12
Cont'd
New
Subj 3

29. The apparatus of claim 20 wherein the components of the gas generating material are present in a weight ratio adjusted to produce upon combustion a reaction gas product that consists essentially of carbon dioxide, nitrogen, and water.

30. The apparatus of claim 20 wherein said polyurethane is formed from an aromatic diisocyanate, a linear energetic polymer with a hydroxyl functionality of two or less, and a secondary diol.

31. The apparatus of claim 30 wherein the secondary diol is 2,4-pentanediol.

32. An apparatus comprising an inflatable vehicle occupant protection device and a gas generating material that, when ignited produces gas to inflate the inflatable vehicle occupant protection device, the gas generating material comprising:

an inorganic oxidizer salt; and
a thermoplastic elastomer, said thermoplastic elastomer being a polyurethane formed from an aromatic diisocyanate, a glycidyl azide polymer with a hydroxyl functionality of two or less, and optionally a secondary diol, wherein the amount of aromatic diisocyanate, glycidyl azide polymer, and secondary diol used to form the polyurethane are controlled so that the ratio of isocyanate groups to the hydroxyl groups used to form the polyurethane is about 1.

33. The apparatus of claim 32 wherein the aromatic diisocyanate is 4,4'-methylene bis-phenylisocyanate.

34. The apparatus of claim 32 wherein the secondary diol is 2,4-pentanediol.

35. An apparatus comprising an inflatable vehicle occupant protection device and a gas generating material that, when ignited produces gas to inflate the inflatable vehicle occupant protection device, the gas generating material comprising:

about 65% to about 90%, by weight of the gas generating material, an inorganic oxidizer salt; and about 5% to about 35%, by weight of the gas generating material a thermoplastic elastomer, said thermoplastic elastomer being a polyurethane formed from 4,4'-methylene bis-phenylisocyanate, a glycidyl azide polymer with a hydroxyl functionality of two or less, and optionally a secondary diol, wherein the amount of 4,4'-methylene bis-phenylisocyanate, glycidyl azide polymer, and secondary diol used to form the polyurethane are controlled so that the ratio of isocyanate groups to hydroxyl groups used to form the polyurethane is about 1.

36. The apparatus of claim 35 wherein the polyurethane is formed from 4,4'-methylene bis-

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phenylisocyanate, a glycidyl azide polymer with a hydroxyl functionality of two or less, and a secondary diol.

37. The apparatus of claim 36 wherein the secondary diol is 2,4-pentanediol.